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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,391	12/12/2003	Shigenobu Nakamura	111288.02	8503

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EXAMINER

MULLINS, BURTON S

ART UNIT PAPER NUMBER

2834

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/733,391	Applicant(s) NAKAMURA, SHIGENOBU	
	Examiner Burton S. Mullins	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/842,915.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/842, 915 filed on 27 April 2001.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 12 December 2003 has been considered in part by the examiner. The US references have been considered; however, all but one of the foreign references and non-patent literature have not been considered since there are no legible copies. See 37 CFR 1.98(a)(2), which requires a legible copy of each foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 are rejected under 35 U.S.C. 102(e) as being anticipated by Kusumoto et al. (US 6,710,501). Kusumoto teaches a stator of a rotary electric machine, comprising:

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a stator core 11 having a plurality of slots 12 (Fig.1); and a poly-phase winding 14 comprising accommodated or 'straight' portions 18a (Fig.2) accommodated in the slots to provide at least two pairs of the accommodated portions (Fig.1), each of the pairs including an inner layer and an outer layer with respect to a radial depth of the slots (Figs.1&3), and turn portions connecting a pair of accommodated portions in the different layers (Fig.8B) and providing coil ends on opposite sides of the stator core (Fig.2), wherein the poly-phase winding comprises a plurality of phase windings U,V,W, each phase winding being made of a continuous wire, i.e., rectangular cross-section conductors, and the turn portions (not numbered, see Figs.1,7&8B) being arranged side by side with respect to a radial direction on the one side of the stator core.

Regarding claims 2, 3 and 5, as seen in Figs.1,7&8B the portions form a surrounding arrangement on one side of the stator core by surrounding one group of turn portions with another group of turn portions; the turn portions are arranged side by side, forming a concentric arrangement on one side of the stator core by arranging the turn portions concentrically; and an even number (2 or 4) of the accommodated portions are layered in the slot.

Regarding claim 4, since the surrounding arrangement of coils in Kusumoto also comprises a concentric arrangement, one of either arrangement can be considered to be at respective ends of the stator core, thus meeting the limitations of this claim.

5. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Auinger (US 3,979,618). Auinger teaches a stator of a rotary electric machine, comprising: a stator core (not numbered, see Figs.2c'&2d') having a plurality of slots (not numbered, see Figs.2c'&2d'); and a poly-phase winding (c.1, lines 8-11) comprising accommodated portions

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accommodated in the slots to provide at least two pairs of the accommodated portions (see Figs.2c'&2d'), each of the pairs including an inner layer and an outer layer with respect to a radial depth of the slots (see Figs.2c'&2d'), and turn portions connecting a pair of accommodated portions in the different layers and providing coil ends on opposite sides of the stator core (see Figs.2c'&2d'), wherein the poly-phase winding comprises a plurality of phase windings, each phase winding being made of a continuous wire (c.4, lines 48-54), and the turn portions being arranged side by side with respect to a radial direction on the one side of the stator core (see Figs.2c'&2d').

Regarding claims 2, 3 and 5, as seen in Figs.2c'&2d', the portions form a surrounding arrangement on one side of the stator core by surrounding one group of turn portions with another group of turn portions; the turn portions are arranged side by side, forming a concentric arrangement on one side of the stator core by arranging the turn portions concentrically; and an even number (2 or 4) of the accommodated portions are layered in the slot.

Regarding claim 4, since the surrounding arrangement of coils in Auinger also comprises a concentric arrangement, one of either arrangement can be considered to be at respective ends of the stator core, thus meeting the limitations of this claim.

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Auinger.

Auinger does not teach round cross-sectional wires, per se. However, this would have been an obvious modification since it has been held that changes in shape or form involve ordinary skill. In re Dailey, USPQ 47 (CCPA 1976).


Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
02 August 2004